Hume Regional Development Australia Committee

Freight Directions in the Hume Region
Summary Report

Regional Development
Regional Development Australia and Regional Development Victoria
HUME

An Australian Government Initiative

Victoria
The Place To Be

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1. Introduction

1.1 Purpose of this report

GHD has been engaged by Department of Planning and Community Development (DPCD) on behalf of Hume Regional Development Australia (RDA) Committee to provide a concise, high level strategy document which will enable the committee to confidently engage with the Commonwealth and State governments, local government authorities and key stakeholders. The key aim of the project is *"to develop strategic directions for freight that can be used to attract investment in the Hume region."*

The report summarises key directions and benefits which are available through changes in the Hume region. Additionally the report provides high level commentary on the impact of the freight directions on the passenger network.

1.2 Project Background

The Hume region (illustrated in Figure 1) covers north east Victoria and the Goulburn Valley and extends over 40,000 square kilometres from the northern boundary of greater Melbourne in the south to the Victorian border in the north. To the west of the Hume Region is the Loddon Mallee Region which includes Bendigo, and to the east and south east is the Gippsland region. The region to the north includes the Riverina area of New South Wales which also has many key links and similarities to the Hume Region.

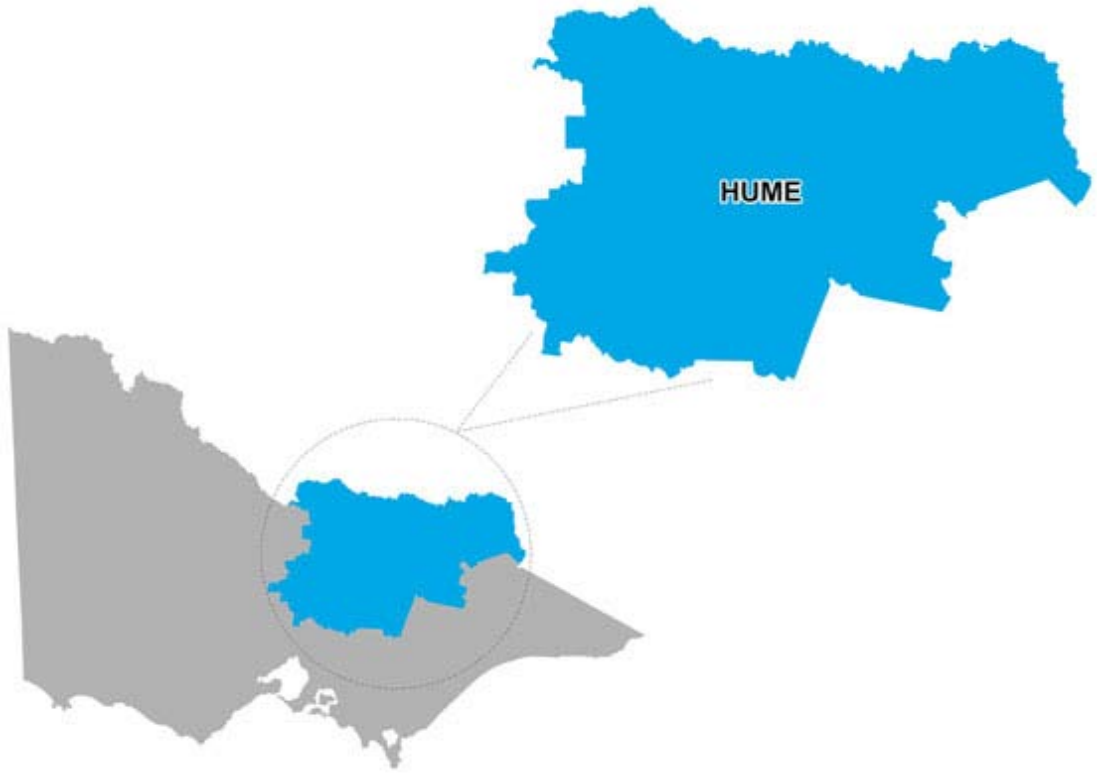


Figure 1 The Hume Region

The Hume Region contains a total of twelve local government areas. It is geographically diverse as it includes Victoria's alpine areas, farming communities, the regional cities of Wodonga, Wangaratta and Shepparton and regional centres of Benalla and Seymour.

2. Strategic Directions for Hume

The Hume Region has a number of opportunities to grow and develop, with the need to align industry outputs and general population growth with freight transport needs to provide efficient supply chains and support industry growth. Parts of the region have recently been through a period of drought and economic downturn where the region's strong horticulture/agriculture and food processing outputs have been reduced with significant impact on the region. Better conditions are now providing a foundation for growth and development around adjustments made during difficult times.

To ensure the strategic directions are relevant to the region and aligned with state and Commonwealth policies and directions, a key goal was developed to guide the process and focus freight directions towards outcomes which would provide benefits in the Hume region, in particular freight managers and customers and support improvements on key high use arterial corridors such as the Hume Freeway.

2.1 The Goal

The goal for the development of strategic directions has been set as the following:

"To maintain and improve the efficiency of the transportation of freight across all modes in the Hume region in order to support continued sustainable economic development."

Examination of recent changes and trends within industry and the freight market in the Hume region have led to a number of key strategic directions on which planning for development of freight can occur within the region. Four key drivers of change, support the goal and the development of Freight Directions as shown in Figure 2.

These directions seek to address key opportunities for improvement and development which can provide a framework for the identification of key freight nodes now and in the future. Collection, consolidation and distribution of freight can be configured to achieve efficiencies, while taking new development away from general residential and other areas where amenity may be impacted.

The directions included in Figure 2 and discussed in the following sections provide a high level summary of the actions that the Hume RDA committee can take forward to support the development of freight across the Hume region. Further details and actions for the partners to achieve the directions are presented in the accompanying detailed Freight Direction in the Hume Region report. The directions provide a framework on which further detail of specific projects can be assembled to support the regional growth directions.

Figure 2 Hume RDA Freight Directions

Strategic Direction One - Building the Capacity of the Hume Freight Network.

There are two key strategies:

1.1 Facilitate industry support for rail gauge standardisation in the Hume Region	
Context	Standard gauge rail track is used for the national rail network and provides flexibility and common requirements for rail operators. The Goulburn Valley, Tocumwal, Echuca and Deniliquin in southern NSW are located on Victorian broad gauge rail restricting broader access and limiting the scope of operators. Rail operators provide limited resources and investment to the broad gauge network particularly regions with variable freight volumes (e.g. grain). The rail corridor north east of Seymour was recently converted to standard gauge to facilitate additional capacity on the national link. The main driver for conversion is improvement in access for rail operators, a basis for investment and increased competition for rail freight. Conversion of the Goulburn Valley line to standard gauge also impacts the regional passenger services with a need for alterations to rolling stock, standard gauge capacity and passenger train stabling within the Melbourne area.
Benefits	The potential benefits for pursuing this strategy are: • Increased opportunity for competition on rail within the Hume region (with increased focus on the Goulburn Valley line). Flexibility for rail operators across the broader network and potential growth in rail use. • A network on which supports investment in equipment and strengthens connections for the Hume region to its markets. • Greater ability to connect directly to the interstate network which improves efficiencies and provides for more direct movements on rail to the north. • After the relocation of the Dynon Terminals there will be capacity within the freight network to accommodate for increased freight access to the port precinct and passenger volumes within Melbourne.
Hume RDA Actions	The key actions for the Hume RDA to pursue for this strategy are: • Promote rail standardisation in the Goulburn Valley to support growth and economic benefits along with connecting to the potential development of the Melbourne–Brisbane inland freight line. • Support the investigation of current limitations of Standard and Broad gauge access to Melbourne to clarify key elements required for a conversion of the Goulburn Valley rail tracks to standard gauge operations.

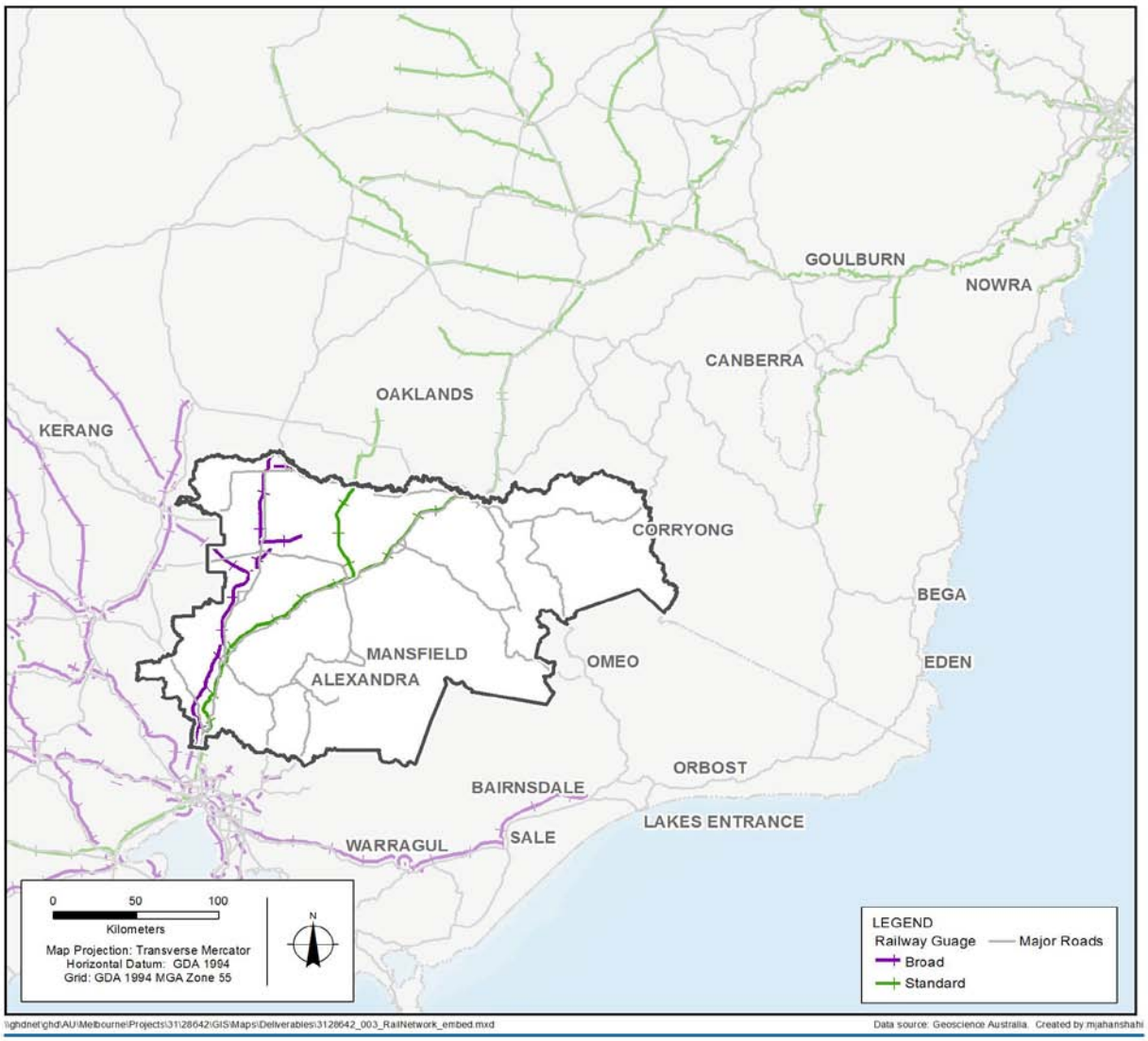


Figure 3 Existing Rail Network indicating rail gauge

View of Wodonga Bypass
(Part of recent gauge conversion)

1.2 Promote opportunities to develop the region's national road corridors.	
Context	The Hume Highway corridor provides the principal link between Melbourne, Sydney and regional NSW with the highest freight volumes. The Goulburn Valley Highway provides the key link between Melbourne and Brisbane. Traffic volumes are increasing on both highways. High Productivity Freight Vehicles have been trialled on the broader road network and scoping is underway for a trial on the Hume Freeway. The Goulburn Valley/Newell Highway is progressing development towards a dual carriageway connection to the NSW border region. The Nagambie Bypass will soon be open bringing additional efficiencies and access closer to Shepparton. Some development of additional rest areas and fatigue management facilities on these highways is underway to improve safety.
Benefits	The potential benefits for pursuing this strategy are: • Improved freight efficiency on higher quality roads providing national connections on the relevant heavy vehicle networks. • Enhanced connections between the Hume region and northern adjoining regions, providing opportunity for flow of freight and integration with Freight and Logistics Precincts (FLP's) in the Hume region. • Duplicated highways provide options for higher capacity vehicle access with lane segregation for safety. • Continuity of higher capacity vehicle capabilities for road vehicles along major corridor routes reducing trailer drops and enhancing efficiency. • A reduced number of trucks on roads due to capacity improvements. • Improved access, safety and connections to ports and major freight nodes via the key Hume corridor.
Hume **RDA Actions**	The key actions for the Hume RDA to pursue for this strategy are: • Continue to promote the development of capacity improvement options which support national and local efficiencies including the connection to LOGIC facilities and the Shepparton Bypass. • Advocate for the continued development of additional rest areas incorporating trailer exchange locations on the Hume and Goulburn Valley/Newell corridors.

Heavy Vehicle Rest Areas need to be developed to incorporate trailer exchange locations on the Hume and Goulburn Valley Highways

Major Roads in Hume need continual consideration of upgrade similar to other major roads in Victoria
View of Princess Highway

Strategic Direction Two - Improving freight efficiencies within the Hume Freight Network

There are two key strategies:

2.1 In collaboration with partners explore the development of a consistent heavy vehicle road network for the Hume region linked to NSW.	
Context	Inconsistencies in road vehicle regulations have existed between states and adjoining regions due to state based approaches and policies. A National Heavy Vehicle Regulator is being introduced in January 2013 with the aim of consistent regulation of heavy vehicles in all states. A Performance Based Standards (PBS) scheme which alters the focus of heavy vehicle assessment to performance based criteria has been introduced by the National Transport Commission (NTC). State based road authorities and local councils will retain responsibility for the access of heavy vehicles to roads they manage. Councils and road authorities are developing clearer definition of the Heavy Vehicle Network which can be utilised by industry. Consistency of approach for heavy vehicle users across northern Victoria and NSW is essential in order to support value add and supply chain productivity. Infrastructure Australia has recommended a trial of High Performance Freight Vehicles on the Hume Freeway.
Benefits	The potential benefits for pursuing this strategy are: • Consolidated heavy vehicle usage in agreed areas of municipalities and major roads. • Greater focus for maintenance programs and the upgrade of relevant truck routes. • Promotion of the use of higher productivity vehicles on appropriate infrastructure. • Reduces overall carbon emissions. • Consistent approaches which provide an integrated network for the use of higher capacity and PBS approved vehicles. • Improvements in amenity for residents with more defined heavy vehicle routes.
Hume RDA Actions	The key actions for the Hume RDA to pursue for this strategy are: • Advocate with partners for the development of a consistent approach to the development of a heavy vehicle road network in the region, inclusive of communication with councils in Victoria and Southern NSW. • Identify and advocate for the upgrade of a defined heavy vehicle network (road and rail networks) for higher productivity travel between key freight nodes.

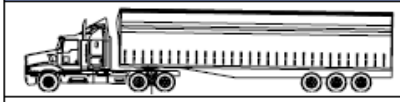
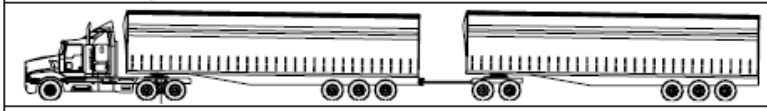
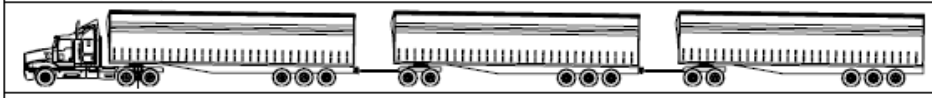
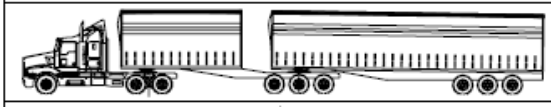
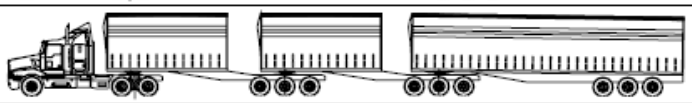
Vehicle silhouette	Common name
	Single articulated
	A-double
	A-triple
	B-double
	B-triple

Figure 4 Heavy Vehicle, comparative lengths

(Source: AustRoads – Design Vehicles and Turning Path Templates, 2006)

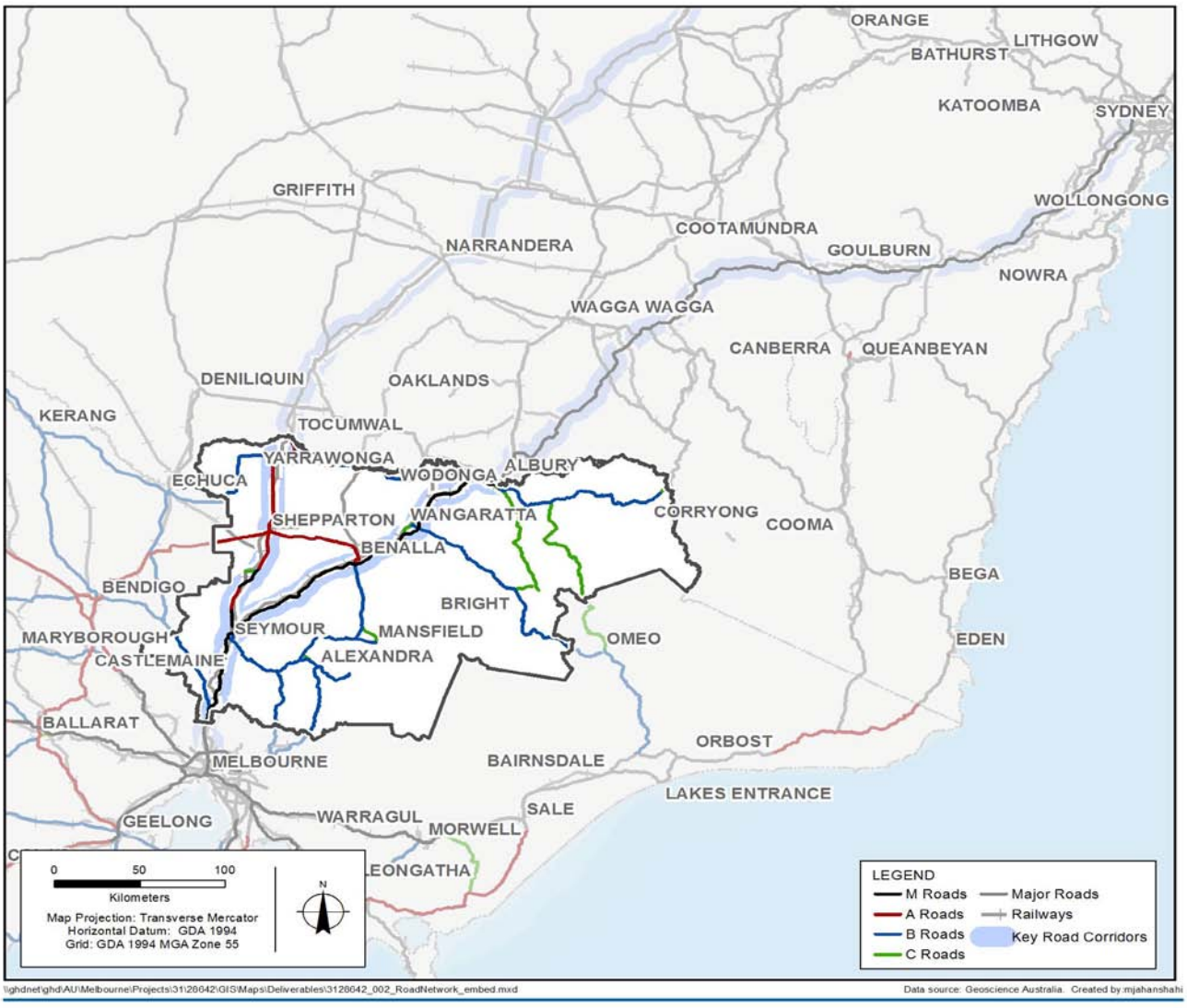


Figure 5 Key road network in the Hume Region

2.2 Promote development of the secondary road corridors and network connections	
Context	Industry and freight movements in the Hume region are highly visible on the main north south corridors however the movements on east west connections are also substantial and feed to the main north south corridors. These links include: • The Midland Highway from Benalla through Shepparton to Bendigo. • The Murray Valley Highway from Wodonga's east along the Murray River. • The Northern Highway from Echuca to Kilmore and Wallan. • The Maroondah/Melba Highway from Benalla to the east of Melbourne. • Kiewa Valley Highway from Wodonga to the snowfields. These highways connect industry to the major corridors and need development at key connection and traffic points. Likely secondary corridor needs in the Hume region include: • Development of the LOGIC centre at Barnawartha leading to changes on the Murray Valley Highway through increased concentration of heavy vehicles and the new fatigue management centre. • East west truck traffic through the Shepparton urban area is the subject of significant delays requiring improvements to Midland Highway links through the area. Partial construction of the Shepparton bypass could assist. • Links from the west to the future Shepparton bypass can provide an alternative to the Northern Highway which has limited access through towns and will require road improvements for much of its length. • Further development of efficient connections to key employment precincts at regional centres along the Hume Freeway.
Benefits	The potential benefits for pursuing this strategy are: • Improved access to and through major regional secondary road links. • Future efficient access from the north west of the region to link with the proposed Shepparton Bypass and provide a 110 kph highway to the Melbourne metropolitan area. • Improved amenity, safety and maintenance efficiencies at the key junction points along corridors. • Relevant connections for the enhanced LOGIC facility and improved access on the Murray Valley Highway.
Hume **RDA Actions**	The key actions for the Hume RDA to pursue for this strategy are: • Promote secondary road corridor improvements in key areas which support regional development (e.g. LOGIC, regional city industrial developments, GV Link linkages and the Midland Highway access through Shepparton). • Advocate for improvements to other secondary connector roads to the main national North South Corridors. Include links to the Shepparton

	Bypass from the west as an alternative to the Northern Highway. • Advocate for a local government freight improvement package (localised roads) for the Hume Region.

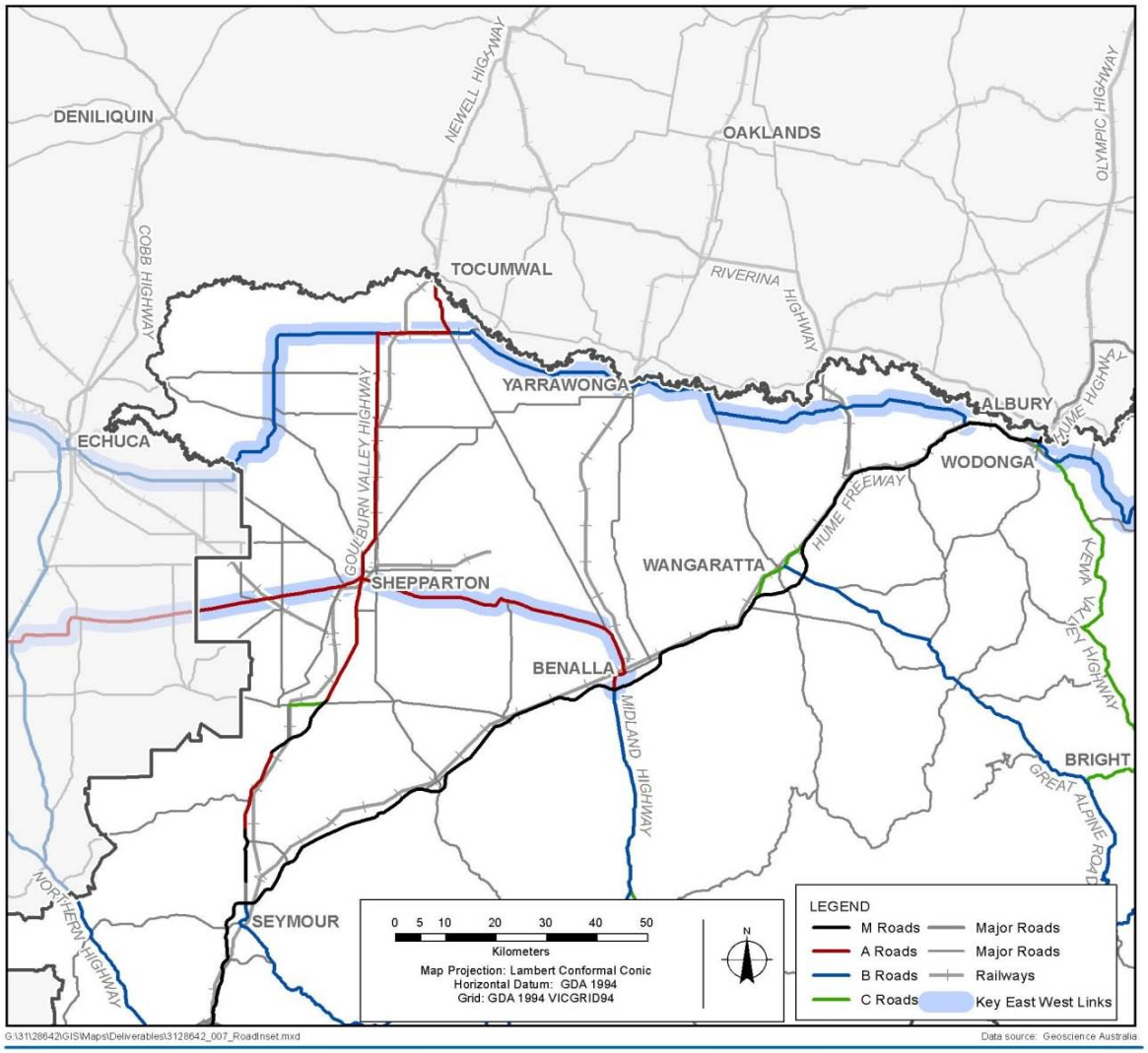


Figure 6 Existing East West Connections in Hume

Strategic Direction Three - Supporting the development of regional freight facilities

There are two key strategies:

3.1 Support further development of the Region's intermodal terminal networks	
Context	• A number of intermodal (rail/road) terminals operate around Victoria and NSW providing supply chain links to the ports for exports. • An intermodal terminal exists in the Hume Region at Mooroopna with further planning in place for the existing LOGIC intermodal terminal and the GVLink terminal (likely to replace the Mooroopna site). Additional freight/rail terminals currently operate just outside the Hume boundaries at Tocumwal, Ettamogah and Deniliquin. • Poor seasons and some industry relocations have impacted services. Efficiency improvements and community benefits will occur with increased regularity and reliability of services. • The current broad gauge network which operates in the Shepparton area restricts the options for flexibility and ramping up and down to meet market needs. • Options exist for a future terminal at Mangalore adjacent to the airport site given its location next to the Hume and Goulburn Valley Highways. Linked with further business development this site could contribute to unlocking and revitalising Seymour's economy. • Feasible to explore the creation of a network of FLPs in the future at Beveridge, Benalla and Wangaratta based on demand. • Intermodal terminals and FLP's form examples of "freight places" in the National Freight Plan which should be connected as part of a national freight network. • The use of intermodal terminals supports the planning objectives of consolidation of freight and land use planning objectives in line with state and national governments' policy agendas.
Benefits	The potential benefits for pursuing this strategy are: • Reduced road traffic and use by heavy vehicles. • Improved environmental outcomes by use of rail. • Further fit to freight planning and consolidation objectives. • Reduced road maintenance and increased road safety. • Improved freight movement and safety both within the state and interstate.
Hume RDA Actions	The key actions for the Hume RDA to pursue for this strategy are: • Support advancement of the major intermodal terminals in the region. • Promote planning for a network of Intermodal terminals within the region. • Advocate for the inclusion of intermodal terminals and freight and logistics precincts into the National Freight Network.

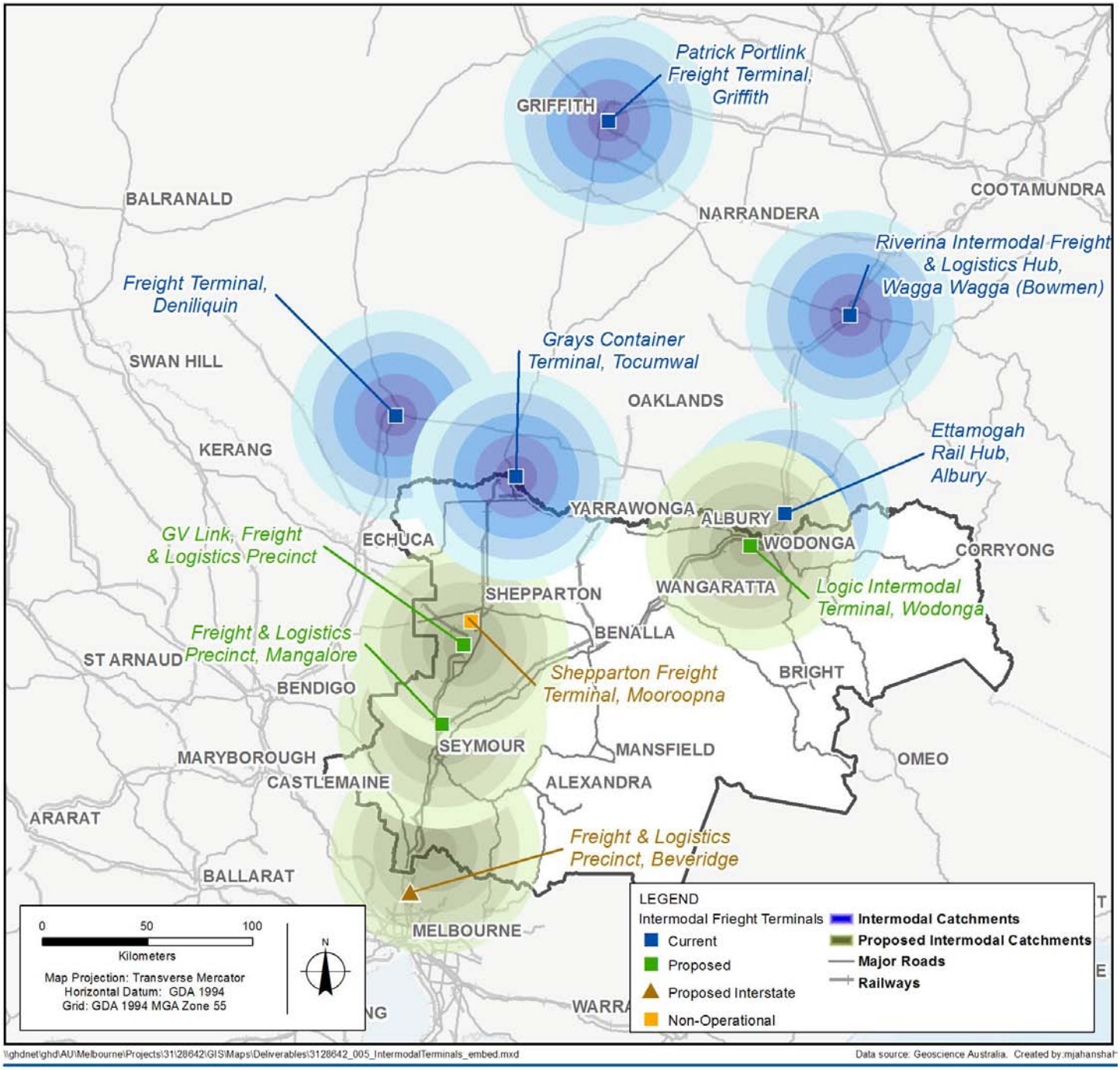


Figure 7 Intermodal Freight Terminals

3.2 Advocate for a clear policy for opening and closing lightly used rail lines	
Context	The Hume region has rail spur lines, used for grain which are closed due to poor seasons and limited output. Closed rail spur lines include the line from Toolamba to Echuca and the Dookie line which branches from Shepparton to major grain facilities. As better seasonal conditions have returned demand for the use of both of these lines has increased to a level where industry wishes to utilise the asset. There is a need for upgrade maintenance to be undertaken to return these lines to active service. There is a need for certainty from industry as to the viability and opportunity for use of these lines and the connectivity and benefits they provide. Industry needs a known mechanism and cost for reopening these vital links.
Benefits	The potential benefits for pursuing this strategy are: • Certainty for industry in the provision of transport mode share opportunities and potential cost reductions. • Clarity over when rail lines will be open and shut and therefore allow for efficient industry planning. • Increased mode share of rail. • Reduced road usage and carbon emissions. • Reduced road maintenance costs. • Opportunity for additional rail usage opportunities.
Hume RDA Actions	The key actions for the Hume RDA to pursue for this strategy are: • Seek discussion with Industry to understand their long term needs for closed rail lines and best transport solutions. • Hold discussions with DoT with a view to seeking policy change for the reopening of closed lines including funding arrangements.

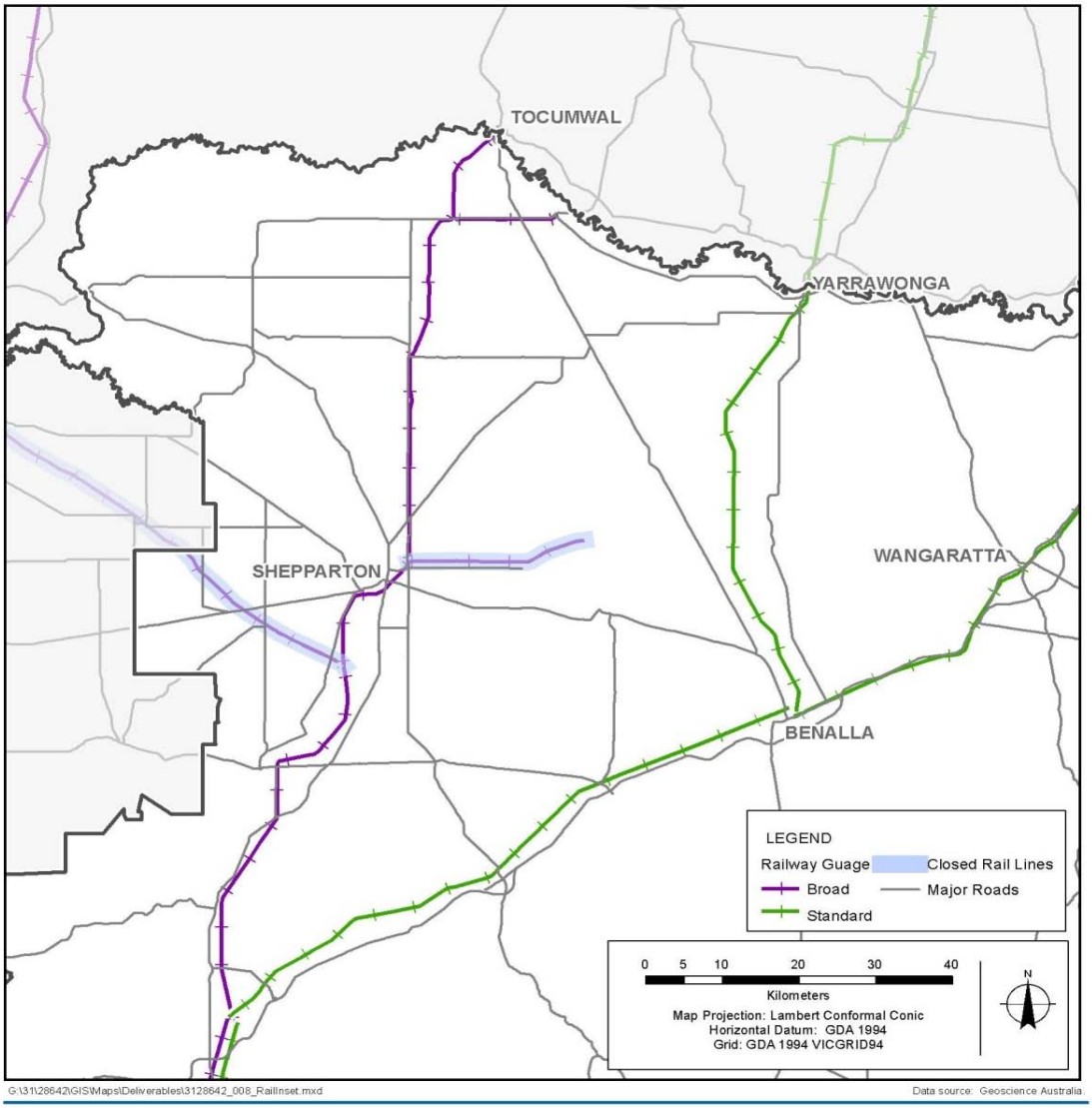


Figure 8 Rail Network – Closed Links

Strategic Direction Four - Supporting a policy and planning framework that takes account of the Hume Region

There are two key strategies:

4.1 Facilitate the development of integrated land use and freight planning (i.e. advocate for freight and logistics precincts in the region)	
Context	The Hume region produces approximately 25% of Victoria's agricultural products and significant manufactured products. The Freight Logistics Precinct concept provides for freight and logistics activities to take place within the one area. Industry may also be part of freight precinct development with warehousing and staging of freight. Support facilities such as fatigue management centres and trailer interchanges can also be incorporated into a FLP. A FLP consolidates freight in one place and allows for efficient consolidated movements which reduce the overall number of trips. Integrated land use planning and FLPs move amenity issues away from residential areas.
Benefits	The potential benefits for pursuing this strategy are: • A plan for consolidation and processing of products within the Hume region will provide links to other regional industries. LOGIC which is well progressed and a future GV Link may be supplemented by FLPs at other locations such as Mangalore, Wangaratta/Benalla and Beveridge (in the longer term). • Positive land use planning outcomes and improved amenity for residents in regional towns and cities. • Reduction of truck movements in residential areas and reduced road maintenance costs. • More efficient supply chains through larger vehicle access with minimised impacts and improved safety. • Reduced freight transfer costs and consolidation of freight places.
Hume **RDA Actions**	The key actions for the Hume RDA to pursue for this strategy are: • Collaborate and influence the development of a network of freight and logistics precincts based on LOGIC and GV Link in order to consolidate industry and freight activity. • Support the land use planning aspects of these precincts which provide significant benefits in efficiency, cost and amenity.

Top: Aerial View of Logic Freight and Logistics Precinct and Hume Freeway Road connections.

Right: Site Layout of Logic Freight and Logistics Precinct.

4.2 Seek further assessment of the Melbourne/Brisbane rail link – clarifying regional growth opportunities and connections.	
Context	• Planning for the future alignment of a Melbourne Brisbane inland rail link is progressing with opportunities for freight efficiencies and increased rail mode share. • Current rail freight between Brisbane and Melbourne travels through Sydney and is the subject of delays caused by curfews for passenger traffic in the Sydney metropolitan area. • The preferred option at this stage has been identified as via Albury and Junee along the existing national rail corridor. This provides access for current rural and significant manufactured goods along this corridor. • An alternative option is a route through Narrandera and Tocumwal with direct connections between the Riverina, the Goulburn Valley and the Melbourne area, including its ports. • Evaluation of the regional economic and social growth prospects is required for an inland route linking the food bowl and manufacturing areas of Victoria, NSW and their markets.
Benefits	The potential benefits for pursuing this strategy are: • Improved connections for the Hume region on the interstate rail connections. • An inland route linking the food bowl and manufacturing areas of Victoria, NSW and their markets may provide increased benefits to the nation. • Further evaluation of opportunities for growth and connectivity generated by the development of an additional national link which will in itself generate development along its length and opportunities to use this link into northern states. • A basis for development of standard gauge access linking both northwards and south to the Melbourne area to improve access and transit times. This benefit is also a key outcome outside of the Hume region as locations such as Griffith would obtain easier, more direct and faster access to the ports.
Hume **RDA Actions**	The key actions for the Hume RDA to pursue for this strategy are: • Work with other regional RDA committees and Government to highlight and promote the benefits which may be available for business should the Melbourne-Brisbane Freight line be constructed through the food bowl areas of Victoria and NSW. • Seek further assessment of potential growth and development benefits which could be generated by the Melbourne to Brisbane rail line along specific alignment options. Consider connectivity of regions, economic and social benefits.

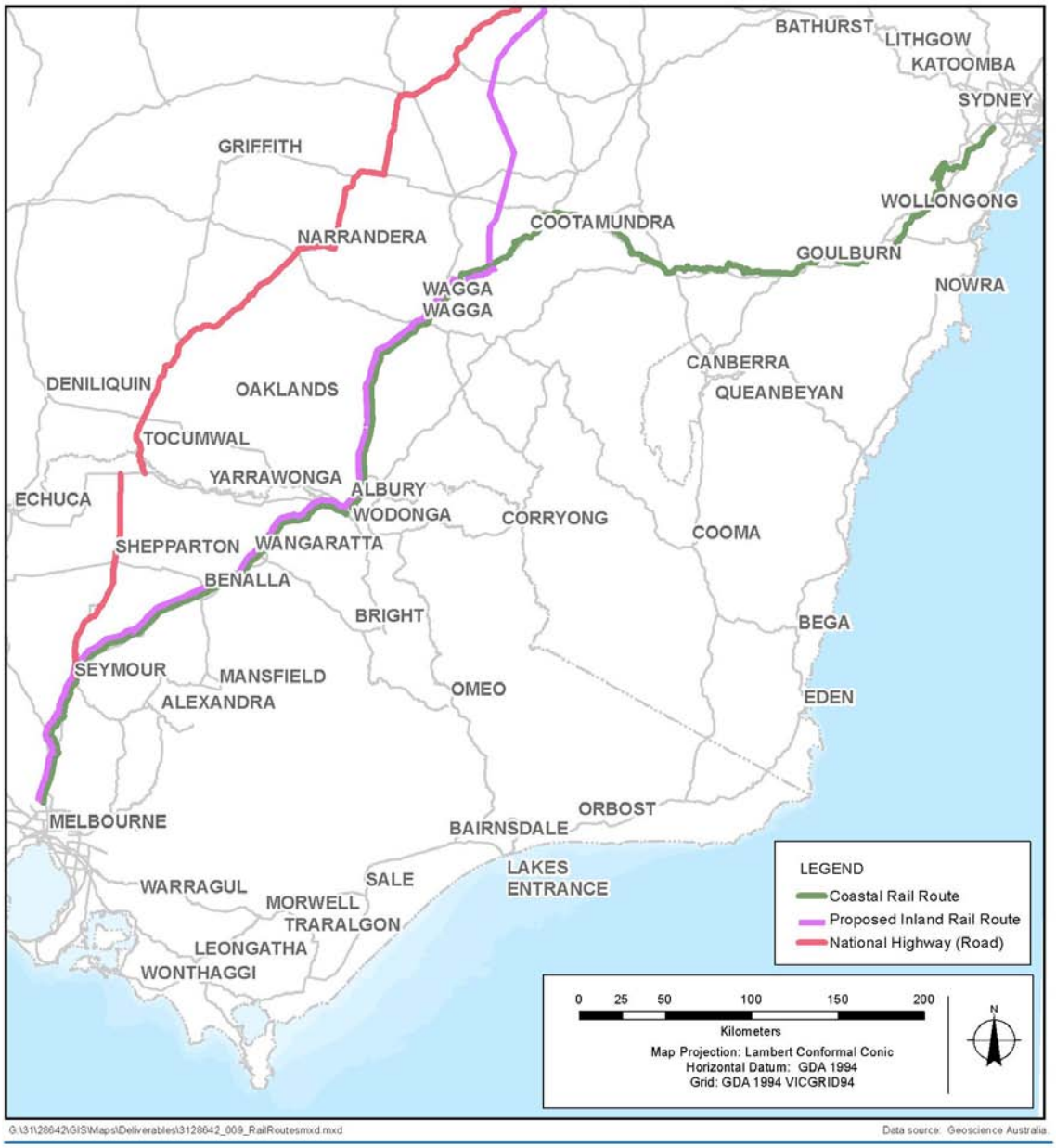


Figure 9 Melbourne to Brisbane Rail Line Alignment Options

3. Freight impacts on the region's public transport.

The current flows of freight within the region are concentrated on major road and rail corridors including the Melbourne/Sydney traffic and Melbourne/Brisbane options on the Newell corridor.

Road freight on major highways and roads across the region have limited impact on public transport as these highways are progressively separated from local traffic through bypasses and diversions from residential areas. Impacts are generally part of general traffic congestion at major intersections in around cities during peak periods.

Rail freight on the north eastern (standard gauge) rail corridor from Melbourne to Wodonga forms a significant part of the traffic volumes on the standard gauge tracks which now service this area. These trains generally carry intermodal shipping container traffic, steel, grains and other bulk products between Melbourne and Sydney and regional areas to ports.

The volume of traffic is high in key periods of the day (which vary along the corridor) but the rail corridor generally has significant latent capacity in regional areas. The major constraints on the corridor are in the Melbourne metropolitan area and at key junctions where the corridor interacts with freight movements in inner Melbourne, and the Dynon precinct. This area also carries trains from the Adelaide and Perth corridor and traffic is consolidated into two tracks which pass through a tunnel to the Dynon and port precinct. This precinct is constrained by the need to move trains constantly around and through a key junction (Sim St rail junction) breaking them into sections which can be handled in rail terminals with limited lengths. The reverse occurs on exit from terminals where shorter sections need to be joined to form 1500m and 1800m trains for departure.

This constraint limits the capacity of the rail corridor, particularly within peak periods in the morning and evening where no further capacity is currently available. Additional trains need to be moved to off peak periods where capacity exists.

The standard gauge corridor also carries interstate passenger trains from Sydney, Adelaide and three trains daily from Wodonga at the current time. While these public transport services are included in current schedules and capacity limitations, capacity constraints restrict further train paths during peak periods. Opportunities for any additional services would require use of off-peak periods where capacity is available.

In addition, standard gauge services on the Wodonga line have been based on a limited supply of standard gauge rail rolling stock (e.g. sprinter style vehicles) and these require maintenance and stabling facilities when not in productive service. Additional services may require extra rolling stock applied to the service with implications to maintenance and stabling facilities. Specific service times and allocation of schedules would be necessary to define specific requirements.

Wodonga rail traffic has also been constrained by the standard gauge network manager's ongoing works on the corridor to address track conditions which have been impacted by a change in sleeper type and the gauge conversion process. These works have extended beyond expected timeframes and directly impact schedules with speed restrictions and on track equipment slowing trains through work areas.

Potential cessation of services to accelerate these track works have been considered and may impact the region in the short term.

The Shepparton line remains on a broad gauge rail corridor as is the Seymour traffic. Regular intermodal container trains and grain trains operate on the corridor. Container traffic is

increasing with better seasons and the intermodal service may return to a daily service. The corridor carries three passenger trains from Shepparton to Melbourne each day with options for coach connections to Seymour for connections with Albury and the local Seymour to Melbourne services.

The use of the broad gauge for rail freight has been limited in recent years and the gauge difference potentially restricts greater use of the corridor for new rail freight entrants who need specific equipment and have limited certainty of tenure on which to base investment.

Future freight needs will be better managed if this rail corridor is converted to standard gauge, providing a wider access to train operators with flexibility to move their vehicles between this area and other rail lines throughout Australia. A key factor in this conversion is the need to align this process with an approach to capacity improvements and changes which can provide greater access through the Dynon precinct and to Southern Cross station. The current limitations in the Dynon area will not allow this change and forecasts of container traffic growth will worsen access opportunities based on the current trends.

Longer term changes which may relocate the Dynon rail terminals to the west of Melbourne to a new facility is likely to free up capacity in the area and provide additional access on the standard gauge corridor however there appears little opportunity for change while the terminals need to operate in the Dynon area.

3.1 Wodonga Passenger Rail Impacts

Wodonga Passenger rail traffic has train paths available on the standard gauge corridor and these will be maintained to service current needs. There is unlikely to be additional opportunity for peak hour access to and from the Melbourne area in either the morning or afternoon peaks (in Melbourne) however access should still be available if required in off peak periods. Additional passenger rail rolling stock may be required to fit this need as V/Line currently only has limited rolling stock available for standard gauge operations.

This can provide for additional services on the corridor however this needs to be aligned to the specific market needs and clarification as to whether additional off peak services meet this demand.

If additional capacity is required for peak access to Southern Cross station there may not be capacity during many periods of the day or week, consideration would need to be assessed on options for services which stop at Seymour or short of the city with a change to suburban or other V/Line trains.

Medium to longer term planning with the Department of Transport will need to be undertaken to ensure an appropriate service offering can be developed which caters for current and future expectations and a reasonable scope of operations aligned to demand within the region.

3.2 Shepparton Passenger Rail Impacts

The Shepparton area public transport rail interfaces with freight traffic have been limited over recent years with low volume freight services. The Shepparton line is not generally the subject of capacity constraints with train crossing points on a single line creating the main issues. The improved seasons have brought some additional rail freight services to the area and some further development changes are planned to signalling arrangements at Murchison East to increase capacity in this area. This should ensure the interface between passenger and freight trains is not the subject of delays.

The current services to Melbourne (on broad gauge) are subject to capacity constraints relevant to overall traffic into the Melbourne area and utilise metropolitan tracks in conjunction with metropolitan electrified services. Priorities are set for regional trains in the timetable but there

remain limited train paths during peak periods. The train path for Shepparton and Seymour trains does not allow access to the proposed regional rail link tracks to the north west of Melbourne so constraints within the current access remain.

Increased capacity for Shepparton trains on the broad gauge network competes with metropolitan priorities and increases in services would need to fit within the available metropolitan windows and align to departure times to and from Shepparton.

Alternatively, options for services which link to Seymour or suburban trains are an option for increased service provision from the Shepparton area. Coaches currently provide some options in this way. Rail services could be built around this concept if sufficient demand was identified but customers would need to change to other services to complete the journey. Additional rail rolling stock and possible train turn around capacity at relevant locations would be required but may be considered as a better option than coach services.

If the Shepparton rail corridor was converted to standard gauge similar constraints would exist as mentioned above for Wodonga traffic. V/Line may need to acquire additional rolling stock for standard gauge and planning will need to occur with the Department of Transport to ensure capacity exists through the key junctions to enable rail pathways at appropriate times. The potential relocation of the Dynon terminals with interstate traffic moving from the area provides one opportunity in future planning when capacity may become available.

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